TWO NEW HOMOPTERA OF THE FAMILY CHERMIDÆ, ONE OF ECONOMIC IMPORTANCE.

BY G. W. KIRKALDY, HONOLULU, HAWAIIAN ISLANDS. Fam. Chermidæ. (= Psyllidæ of some authors.)

Trioza Koebelei, sp. n. (Fig. 14).—The figures of the tegminal neuration and of the male genital segment in profile, and the following brief description, will distinguish this destructive form from the three other

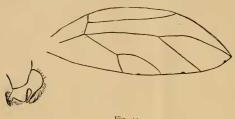


Fig. 14.

North American Trioza species. Head and thorax varying from dark fulvous to blackish, polished, shining. Antennæ testaceous, except apically. Tegmina and wings

hyaline, colourless, nervures brownish. Femora dark fulvous or blackishbrown, tibiæ and tarsi testaceous, except the apices of the apical tarsal segments. Abdomen smooth, polished and shining, black, with a dark bluish-green gloss.

Head and eyes wider than thorax; dorsum medio-longitudinally sulcate transversely, about as wide as the eyes, which are a little longer than broad (as seen dorsally) well rounded, and substylate. Frontal cones small, but well developed. Antennæ longer than head, pronotum and dorsulum together nearly, or quite, as long as posterior tibiæ, third segment very long. Dorsulum suboval. Anterior femora dilated.

- 3.—Abdomen elongate; genital segment (fig. 14) pale fulvous.
- Q.—Abdomen laterally angulate so that it is roughly diamondshaped. Genital segments reddish-brown.

Length to apex of abdomen a little under 3 mm.; length to apex of tegmina in repose, about 6 mm.

Habitat: Mexico, Morelos (Koebele); forms large light brown coloured galls on leaves of Persea gratissima ("Alligator Pear") and is very destructive. The galls are ovoid, with truncate base, and are placed erect (usually) on the upper surface of the leaf. Height, about 6 mm.

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Callistochermes, gen. nov.

Belongs to that section of *Aphalarinæ*, F. Low, which James Edwards apparently includes in Cherminæ (= Psyllinæ), characterized by the frontal cones being well developed; the cubital petiole is about as long as the basal part of the subcostal nervure. The form of the dorsulum and mesonotum recalls the Triozinæ rather than either the Cherminæ or Aphalarinæ.

Head strongly declivous; dorsum strongly transversely impressed, about three times as wide as long, lateral margins diverging slightly anteriorly, posterior margin slightly angularly emarginate. The eyes are attached to the side of the head, and appear suboblique, posterolaterally they are on a level with the very short transverse, linear pronotum. Vertex and frons longitudinally sulculate very distinctly; frons very transverse, with an apical ocellus. Cones bullet-shaped, as seen anteriorly; from beneath they are seen to be narrow at their base and obliquely elongate, contiguous apically. The other ocelli are on the posterior margin of the vertex, subcontiguous to the eyes, which are prominent, transverse, substylate, together almost as wide as the vertex. Head and eyes much wider than thorax. Dorsulum* octohedral, somewhat convex and declivous, much longer than the pronotum; mesonotum convex, a trifle longer than the dorsulum. Tegmina elongate, apically rounded, costa arched. Basal part of subcosta curved, about equal in length to petiole of cubitus, much longer than the part of the subcosta between basal part and radial forking. Stigma short, subtriangular. All the nervures more or less sinuate or curved.

C. rubrovariegata, sp. n.—Anterior half of vertex crimson, freckled with pale greenish and dark brown; posterior half of vertex, the pronotum and dorsulum dark greenish-brown, freckled with crimson and whitish. From pale greenish-white, cones obscure greenish. Eyes grayish-green. Ocelli red. Antennæ pale greenish-yellow, tip of each segment blackish-brown. Mesonotum pale greenish-white, freckled with black, with a linear median and broad lateral pale crimson bands longitudinally. Scutellum pale greenish, with a medio-longitudinal stripe, which at its middle has a very short line at right angles on each side. Abdominal tergites dark greenish-brown, posterior margin narrowly crimson. Tegmina subhyaline, colourless, freckled all over with blackish-

^{*}There is an unfortunate printer's error in Froggatt's paper in Proc. Linn. Soc. N. S. W., 1900, Pl. XIII., f. 2; 4 a should be mesonotum and 3 a dorsulum.

brown, especially apical third and the costa, a large blackish-brown transverse spot commencing just apical to the stigma, which lengthens on the next area and then splits into two, which continue separately to the interior margin, thus forming two narrow, transverse blackish-brown bands, uniting a little above the middle of the tegmen. Veins on apical half of tegmina, crimson. Wings hyaline, veins grayish-brown. Underside bright green, tarsi and tibiæ more or less reddish.

Length of body, 4 mm.; length to apex of closed tegmina, 6¼ mm. Habitat: Queensland, Brisbane (July, 1904, R. C. L. Perkins), on grasses in a mangrove swamp.

This is the most ornate Chermid yet described.

DR. HOLLAND'S MOTH BOOK.

The following corrections in the genus Catecala in Dr. Holland's Moth Book" should be made:

Plate XXXI.—Fig. 4, is a well marked form of *C. agrippina* and not var. *subviridis*. Fig. 8, is *C. luctuosa* and not *retecta*. Fig. 11, is *C. Angusi*, var. *lucetta*, and not *C. flebilis*. Fig. 14, is *C. obscura*, var. *residua*, and not *C. obscura*.

Plate XXXII.—Fig. 5, is *C. flebilis* and not *C. carolina*, subsp. nov. Fig. 6, is *C. relicta*, var. *clara*, and not *C. relicta*. Fig. 7, is *C. relicta* and not var. *bianca*.

Plate XXXIII.—Fig. 1. This poor figure looks like a very pale example of *C. irene* and is not *C. Californica*. Fig. 4, is *C. ultronia*, var. adriana, and not var. celia. Fig. 6, may possibly be *C. Meskei*, but the species is not recognizable from the figure. Fig. 7, is one of the many varieties of *C. ultronia* and not var. mopsa. Fig. 8, looks like *C. Californica* and is not var. augusta.

Plate XXXIV.—Fig. 7, looks like *C. ilia* and is not var. *osculata*, which has clear yellow hind wings.

Plate XXXV.—Fig. 7, is C. gracilis, var. sordida, and not C. praeclara. Fig. 1, is C. sancta and not C. amasia. Fig. 2, is C. similis, var. aholah, and not C. similis. Fig. 3, is C. similis and not var. aholah. Fig. 5, looks like C. blandula and is not C. fratercula, var. jaquenetta. Fig. 13, is C. mariana and not C. Stretchii. Fig. 14, looks like C. Californica, and is not var. cleopatra. Fig. 15, looks like C. Californica, var. cleopatra, and is not C. rosalinda, which is a straight synonym of C. Meskei.

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